

PATENT

## **AUTOMATED ACCOUNTING SYSTEM**

### **CROSS REFERENCE TO RELATED APPLICATION**

This application is a continuation-in-part of U.S. Application Serial No. 08/313,988 filed September 28, 1994.

### **BACKGROUND OF THE INVENTION**

5        This invention relates to an automated accounting system, and more particularly, to providing an automated accounting system for an entity such as an individual or a business in which a plurality of data inputs are made to a file established for the entity, the data inputs including 10 electronically recorded financial transactions made between the entity and other entities. Access is provided to the file for agents of the entity being served so that one of the agents can perform one or more activities related to the data inputs, such as entering, deleting, reviewing, adjusting and 15 processing the data inputs.

There have been proposed a number of systems and methods in which financial and business information has been computerized. My United States Patent No. 5,193,055 discloses an accounting system in which a standard category code listing 20 is used to code money transfer instruments, such as checks, into a computer file. The information in that computer file is then used to generate various accounting reports. The standard category codes can be personalized in order to meet the particular needs of the user. For example, job numbers 25 can be coded on the check to track income and expense for individual projects.

United States Patent No. 5,220,501 discloses a method and system for remote delivery of retail banking services. A user can access an ATM (Automatic Teller Machine) 30 from a dedicated remote data terminal in order to transfer

funds from a bank account to a third party payee. A central computer receives instructions from the remote terminal and debits the user's bank account as well as distributing the funds to payees requested by the user. See also United States  
5 Patent No. 5,202,826.

Despite the existence of these systems, no one has conceived a total accounting system in which users, such as businesses, individuals, merchants, financial institutions and other entities are connected into a network where financial  
10 transaction information is captured, analyzed, reviewed, adjusted and processed and then used to generate accounting statements.

As computer hardware technology becomes more advanced and less expensive, many if not most financial  
15 transactions will be electronically recorded. For example, if a customer purchases a building product, such as a window, from a building products dealer, that sale can be electronically recorded in a ledger in the building product dealer's computer. No one, however, has conceived of a system  
20 in which the user and the building product dealer are connected in a network such that the recorded financial transaction, along with all other financial transactions recorded in the network, could be used to generate accounting records useful to the members of the network.

25 The recorded financial transactions, in order to be useful to the multitude of different users in the network, must be accessible to various agents. There is a need therefore for agents, such as accountants, to have access to the recorded financial transactions before, during and after  
30 the financial transaction is made. In this way, electronically recorded financial transactions can be entered, deleted, reviewed, adjusted and/or processed in order to provide the proper input data for the system.

After the data has been entered and reviewed, it  
35 would be desirable for the user to be able to choose which

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services are required from the system. For example, an individual may only be interested in obtaining tax accounting services, whereas a business may need a more complete set of financial reports.

5 Finally, an effective system must have a funds transfer clearinghouse, such as that disclosed in United States Patent Nos. 5,220,501 and 5,202,826.

10 What is needed, therefore, is a connected system (or network) of users, such as individuals, businesses, merchants, financial institutions and other entities, that can provide its users a method of automating the accounting of all financial transactions made by the user and other entities in the network.

#### SUMMARY OF THE INVENTION

15 An automated accounting system for an entity, such as an individual or business is provided in which at least one file is established for the entity and a plurality of data inputs are provided to the file. The data inputs include electronically recorded transactions made between the entity and other entities. Standardized codes including financial transaction codes and/or standardized itemization codes are established. The automated accounting system preferably uses a common language in and among computer systems and/or entities to enable the computer systems and/or entities to communicate processing instructions and utilize the standardized codes. Individual codes are provided before, during or after the time of the transaction for automated entry into single and multi-tiered uniform accounting ledgers. Access may be provided to the file for agents of the entity so that one of the agents can perform one or more activities such as entering, deleting, reviewing, adjusting and processing.

30 In one embodiment of the invention, I provide a method of providing financial accounting reports and statements for a first entity such as an individual or a

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business. The method includes the steps of providing a menu of standardized codes, including financial transaction codes and/or itemization codes, conducting through other entities separate financial transactions including transfer of funds  
5 and instruction for transfer of funds with the first entity at a plurality of separate points, associating the standardized codes from the menu at the time when the funds are transferred or instructions are given for transfer to complete the financial transaction, transmitting a record of each  
10 transaction and selected standardized codes to at least one separate financial accounting system at about the time of the transaction, sorting the transactions in the separate financial accounting system and producing an accounting statement in a desired format, and printing or electronically  
15 displaying the statement results.

In another embodiment of the present invention, I provide a financial accounting system including a financial accounting computer having at least one file, a financial transaction computer for receiving data inputs including  
20 electronically recorded financial transactions made between a first entity and a second entity, first communication means for transferring the data inputs from the financial transaction computer to the file of the financial accounting computer, and means for providing access to the file of the financial accounting computer for the first entity and/or agents of the first entity so that the first entity and/or the agent can perform one or more activities selected from the group consisting of entering, deleting, reviewing, adjusting  
25 and processing the data inputs.

30 **BRIEF DESCRIPTION OF THE DRAWINGS**

A full understanding of the invention can be gained from the following description of the preferred embodiment when read in conjunction with the accompanying drawings in which:

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Figures 1-4 are flow charts showing the method and system of the invention.

### DESCRIPTION OF THE PREFERRED EMBODIMENTS

The method and system of the invention provide an  
5 automated accounting system which brings together in a connected or network fashion, all of the various entities that are involved with financial transactions between a first entity, such as an individual or a business, and other entities, such as merchants, financial institutions and the  
10 like. The financial transactions are recorded as data inputs in a file established for the first entity. The data inputs can be accessed by agents of the first entity, such as accountants, money managers and the entity itself, in order to enter, delete, review, adjust or process the data inputs.

15 The first entity can be a business or an individual. The entity being served will have established at a central or host computer a master ledger that is used to receive data inputs in the form of electronically recorded financial transactions. It will be appreciated, however, that the  
20 central or host computer can be the individual entity's personal automatic computing device (such as a personal computer or a telephone computing device) which can receive the data inputs and, in the case of a personal computer, for example, process the data inputs by using off-the-shelf  
25 accounting software. Therefore, even though the specification set forth herein will focus on a central or host computer, it will be appreciated that the above mentioned alternatives of a personal or telephone computer are contemplated by the invention.

30 Figures 1-4 show a flow chart which illustrates the invention. Referring in particular to Figure 1, in box 20, the personal and business accounts resident in the master ledger in the host computer are initialized. This may include, for example, selecting automatic coding preferences,

source inclusions, business accounting rules, reporting detail, individual job record-keeping and interactive user authorization registrations. All of these selections personalize and customize the master ledger for effective use  
5 of the invention. Also, two separate master ledgers can be established, for example separate cash and accrual ledgers, so that desired data can be entered into these ledgers and can be used to provide both tax preparation and cash reports.

The system then proceeds by line 21 to box 22 where  
10 the accounts as established above are assigned code numbers. A standardized account menu for business and personal financial transactions is most often times established (see, for example, United States Patent No. 5,193,055), however, establishment of subcategories of income and expense  
15 items may be made resulting in more than one detailed subcoding schedule. Standardized account formats are generally used to provide information to outside agents, whereas the more complex subcoded detail is generally retained by the entity using the system for internal use only.

20 Next, line 23 leads to box 24 where subsidiary ledgers for automated record keeping and reporting are selected. While a master ledger is established in a central or host computer, subsidiary ledgers are established in computers, such as personal computers, at all entities with  
25 which the first entity will enter into financial transactions. These subsidiary ledgers can be established with financial institutions, merchants, and other entities with which the entity being served will have financial transactions, including but not limited to automated teller machines,  
30 telephonic computers, banks (for checking and savings accounts, for example), investment/brokerage firms, merchants and other automated systems/record keeping devices. Automatic coding devices can be associated with these subsidiary ledgers to record and transmit data concerning the financial  
35 transaction at the time of the financial transaction. The key

idea is for all of these entities to electronically record, collect, process, store and transmit all financial transactions by all of the entities, including the first entity, that enter into financial transactions with that  
5 particular entity. In this way, all of the entities can be connected in a network fashion so that accounting information can be fully and accurately developed among all of the entities. Recorded transactions may be entered into one or more tiers (layers) or subsidiary ledgers of either the cash  
10 or the accrual ledger or both ledgers to facilitate computation and reporting of more than one accounting procedure at a single time through the use of one or more common language instructions and standardized transaction codes which may include one or more of the following:  
15 transaction process instructions, charts of accounts, user selection menus, accounting rules and standard calculations, funds transfers instructions and codes, individual system network instruction codes, and layers or tiers of instructions and financial accounting codes for individual system or  
20 connected systems operations. The establishment, operation and transfer of data from the subsidiary ledger to the master ledger will be discussed in greater detail below with respect to Figure 2.

Referring back to Figure 1, the subsidiary ledgers  
25 that are desired to be included in the master ledger are selected at box 24. Even though every entity with which the first entity is connected will have a subsidiary ledger, the first entity may only desire to have certain data inputs transferred from the subsidiary ledgers to the master ledgers.  
30 For example, the first entity may only want data inputs from financial institutions and not merchants. In this box 24, that selection can be made.

After box 24, the system proceeds by line 25 to box 26 where beginning balances for income, expense, asset,  
35 bank accounts and liabilities are entered. Next, line 27

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leads to box 32 where passcodes are issued to approved interactive account user(s) and agent(s). Agents can include accountants, brokers or other financial advisors. The account user(s) can include the first entity as well as authorized  
5 users of the first entity, such as the controller or bookkeeper of a business. This access to the master ledger and subsidiary ledgers allows the agents to perform activities selected from the group consisting of entering, deleting, reviewing, adjusting and processing data inputs in the master  
10 ledger and subsidiary ledgers. This access allows agents to enter, delete, review, adjust and process data inputs before, during and after a financial transaction in order to customize the transaction to make it fit into the accounting scheme of the individual entity. Users may select the degree and  
15 timeliness of master or subsidiary ledger computations and reporting with or without operation of their own computer.

Next, line 33 leads to box 40 where the updates from the subsidiary ledgers are entered into the master ledger. Referring now to Figure 2, the establishment of, operation of  
20 and transfer of data from the subsidiary ledgers will be discussed. It will be appreciated that each of the other entities in the network will have means (usually computers and probably PC's) which will be used to electronically record, collect, process, store and transmit all financial  
25 transactions between the first entity (and other entities) with that particular entity.

In box 100, the accounts are initialized in the subsidiary ledger computer. This step is similar to the initialization step in box 20 of Figure 1. Next, line 101 leads to box 102 where the personal/business code numbers for transaction recording are assigned also similarly to box 22 in Figure 1. In addition, individual job accounting (receipting and costing) may be automatically facilitated by an alphanumeric identifier at the point of entry. Vendors and

payees may be listed by category for automatic ledger entry and coding.

Line 103 then leads to box 104 where the ledger data processing and transfer options are selected. For example, 5 automatic codes and/or instructions are entered into ATM's, point-of-purchase machines, check reading equipment or other systems where the subsidiary ledger is maintained. These codes can identify methods for funds transfer and accounting for each of the subsidiary ledgers. For example, credit 10 balances may be maintained automatically by account until requests for funds transfer are answered with remittance. If no payment is made within a predetermined time, balances are added to personal company payables and receivable lists either automatically or by command.

15 After this, line 105 leads to box 106 where communication links with the master ledger and external sources are established. It will be appreciated that although agents have access to both the master and subsidiary ledgers, the access can be restricted by instituting predefined 20 communication rules. However, transmittal of transaction records and account balances are made routinely from the subsidiary ledger to the master ledger as will be described below. Line 107 leads to box 108 where the beginning balances for income/expense and asset categories are entered.

25 Next, line 109 leads to box 110 where passcodes are issued to approved agents. In order to ensure access to the subsidiary ledger by the first entity and agents of the entity being served, passcodes are issued to the approved interactive account user(s) including agents of the entity being served at 30 box 110.

The system then proceeds by line 111 to box 112 where the financial transactions by account are recorded to the subsidiary ledger. For example, in the case of a merchant, the first entity may buy an item and this financial 35 transaction will be recorded. Check imaging equipment may be

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designed to read check face information including coding for automatic entry into subsidiary ledgers for financial transactions between the entity and other entities. Similarly, a 4-5 digit coding sequence may be installed in ATM 5 transaction files for users to identify sources and uses of funds. Credit card transactions, however, will likely require the entry at the point-of-purchase of appropriate coding information.

Line 113 then leads to decision box 130 where the 10 entry is then reviewed as to whether it is valid or not. If not valid, line 131 leads to box 132 where an error statement is printed. After this, line 137 leads to decision box 140 where a decision must be made to return to passcode entry by line 141 or by line 143 to exit the ledger routine 144.

If the entry is valid, line 151 leads to decision 15 box 152 where the instruction is reviewed for validity. Validity is determined by comparing amounts, codes, vendors and payees with those preestablished coding and decision rules elected in boxes 22, 24 and 102, 104. Invalid entries are 20 recorded separately for security reasons. Valid entries are included in subsidiary and master ledger calculations. More specifically, if the instruction is not valid, line 153 leads to box 132 and the same procedure as was discussed above is repeated. If the instruction is valid, line 155 leads to 25 box 160 where the subsidiary ledger balances for external review and reporting are accumulated.

The system then proceeds by line 161 to box 170 where the periodic transfer of data inputs from the subsidiary ledger to the master ledger is set forth. This can be 30 accomplished by a modem, or other data transfer equipment. This is shown by line 171 which goes to line 33 of Figure 1.

Referring back to Figure 1, the data inputs from the subsidiary ledgers are transferred to the master ledger. Line 41 then leads to box 44 where the access to the data 35 inputs in the master ledger is set forth. This access can be

provided to interactive users and agents of the first entity. At this box 44, change orders, recording instruction adjustments, manual transactions and the like can be entered by the agents or the interactive users.

5 After this, line 51 leads to decision box 52 where the validity of the entry is determined. If the entry is not valid, line 53 leads to box 54 where an error statement is printed. Once the error statement is printed, the method returns to box 44 by line 61. If the entry is valid, line 63  
10 leads to decision box 64 where the validity of the instruction is determined. Validity is determined by whether the passcode matches the predesignated list of approved passcodes and whether the entry is complete in form and substance. For example, if either the form or substance of the attempted  
15 entry is dissimilar with past transaction records for that user, a request for further information will be initiated. If the instruction is not valid, line 67 leads to box 54 where an error statement is printed. If the instruction is valid, then line 69 leads to decision box 70.

20 In decision box 70, the user is asked whether the funds transfer facility is needed. If the funds transfer facility is not needed, line 75 leads to the accounting statement module shown in Figure 3. If the funds transfer facility is needed, line 81 leads to the network transfer facility shown in Figure 4.

Referring now more particularly to Figure 3, line 75 leads to a decision box 200 in which the user is asked whether accounting routines are needed. If not, line 201 leads back to line 61 (Figure 1). If the accounting subroutine is  
30 desired, line 203 leads to box 204 where the files are updated according to the entity's report selections. If simple cash accounting routines have been selected, then only those accounting subroutines will be effected. If tax preparation reports are requested, then all accounting subroutines necessary to complete those tax reports are effected. After

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this line 207 leads to box 210 where the accounting sequences for future processing are completed. For example, daily, weekly, monthly and annual reports, including statistical comparisons for this and other uses, may then be printed at 5 the user's option. Subroutines for each option permit users to personalize individual and business record keeping and reporting.

Line 211 then leads to box 214 where accounting subroutines selected by the first entity are utilized. In 10 this way, the first entity can select one or more or all of the available accounting statements desired. For example, an individual may be only interested in obtaining tax preparation documents, whereas a business may desire a full set of financial documents, including balance sheets and income 15 statements. Thus, the system is truly a self service system in that the first entity can select the desired accounting reports from a large menu of available reports. The pricing of the system can be tailored to this choice. For example, a first entity needing only two reports would pay less for use 20 of the system than a user needing ten reports.

After this, line 215 leads to a decision box 216 where account statement files are determined to be balanced or not. If not, line 221 leads to box 222 where an error statement is printed. If the account statements are in 25 balance, line 225 leads out of box 216. Line 227 leads out of box 222 after the error statement is printed in order to join line 225. The error statement will direct the entity (or agent) to make appropriate adjustments to coded transactions which result in balanced accounts in both subsidiary and 30 master ledgers.

After this, the ordered reports are transmitted to the entity being served at box 290. Ten separate reports are shown in box 240. The reports can be electronically mailed or hard copies can be produced and forwarded to the user by 35 telefax, messenger, overnight courier or first class mail.

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The advantage of the system is that these reports can be processed faster than currently available services.

After this, line 261 leads to a box 262 which asks for the next account to be processed.

5 If the funds transfer facility is needed, line 81 leads to decision box 300 where it is asked whether an instruction to transfer funds is desired. The funds transfer facility allows automatic (electronic) transfer of funds/payments by and between the entity's accounts (banks, 10 for example), as instructed. Access to any and all payment clearinghouses is anticipated along with the funds transfer facility. Line 301 leads to box 302 where account no. 1 (that of the merchant, for example) is debited with the funds and then by line 303 to box 304 where account no. 2 (that of 15 the entity being served) is credited. If desired, credit balances may be maintained automatically by account until requests for funds transfers are answered with remittance. If no payment is made within a predetermined time, balances are added to company and payables and receivables lists either 20 automatically or by command. After this, line 305 leads to box 306 where the next instruction is requested and then by line 307 back to box 300 to start the process again.

If a transfer funds instruction is not requested, line 311 leads to decision box 312 where the user is asked 25 whether there is an instruction to transfer data. For example, an entity may elect to transfer vital operating statistics to a banker for loan monitoring purposes. Suppliers of material can ship replacement inventory quickly and accurately with current sales history and inventory 30 replenishment requirements transmittals. Finally, payroll statistics are often times required to be provided by the entity to government agencies, health providers, labor unions, and the like. If so, line 313 leads to box 314 where the data is transmitted and then by line 315 to box 316 where the date, 35 time, records sent, transfer name and address are recorded.

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After this, line 317 leads to box 306 where the next instruction is requested.

If a transfer data instruction is not requested, line 321 leads to decision box 322 where the user is asked whether there is an instruction to adjust current records. Entities or agents can enter coded records of financial transactions or adjust current account records when certain transactions have not been automatically recorded by the system and when errors in previous entries have occurred. If so, line 323 leads to box 324 where the records are adjusted for current action and then by line 325 to box 326 where the date, time, records sent, and transfer authorization are recorded. After this, line 327 leads to box 306 where the next instruction is requested.

If an adjust current records instruction is not requested, line 331 leads to decision box 332 where the user is asked whether there is an instruction to adjust future action. Periodically, entities and users must change decision rules previously entered into the system. Adjustments in system recording or reporting may stem from changes in generally accepted accounting principles, reporting period changes, depreciation adjustments, income or expense category additions or deletions, cash versus accrual interpretations, statistical comparison definitions and the like. Line 333 leads to box 334 where the instructions are adjusted for future action. After this, line 335 leads to box 336 where the date, time, records sent and transfer authorization are recorded. After this, line 337 leads back to box 300 at the beginning of the network transfer facility module.

If an adjust future action instruction is not requested, line 351 leads to decision box 352 where the user is asked whether this is a final instruction. If not, line 353 leads to box 354 where the method goes to the next instruction. If it is the final instruction, line 361 leads to box 362 where the funds transfer facility is exited.

FUND TRANSFER FACILITY MODULE

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It will be appreciated that an automated accounting system is shown in which a first entity and other entities with which the first entity enters into financial transactions are in a connected network. Access is provided to the 5 electronically recorded financial transactions for agents of the first entity, such as accountants. These agents can perform activities such as entering, deleting, reviewing, adjusting and processing data inputs. In addition, accounting reports can be generated and a funds transfer facility is 10 provided.

The following example illustrates various aspects of the invention, and is not intended to limit the scope of the claimed invention.

EXAMPLE

15 Consider the example of a building contractor's purchase of a \$500 window for installation in an apartment complex from a building materials retailer by check or credit card. Under conventional systems, the purchase would not be recorded since only computer-to-computer transactions between 20 related on-line suppliers and their wholesale or retail agents are recorded. If the window transaction related to a sale of inventory goods from a manufacturer to a dealer, the inventory number of the item would have been recorded in a file for later accumulation with other itemized transactions which 25 accumulations would be reported as historical evidence that the transaction took place on a specific date as part of one or more order placements. Funds would have been transferred electronically to pay for the item at the appropriate time. The total number of transactions could be reported to both 30 parties using the nomenclature, usually including standardized item numbers agreed upon by the parties which numbers appear within the bill presentments and inventory replenishment account files within the computer-to-computer system. Specifically, if a window had been requisitioned via a

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conventional system, a 3 feet wide by 4 feet tall double-hung window might have a DHW34 standard code. The DHW34 unit would be entered (sometimes automatically) as an inventory addition to the inventory ledger of the purchaser and a corresponding reduction in the cash account file would occur (sometimes automatically). The reverse would take place in the vendor's ledger files. The total items and funds transferred would be periodically reported for inventory and cash account purposes only.

- 10       The automated accountant system of the present invention recognizes that the bulk of transactions in an economy do not take place wherein users are interconnected computer-to-computer. The window example and most of those in the retail trade do not involve purchaser computers at all.
- 15       A \$500 DHW34 window purchase by a contractor is usually accomplished by check or credit card. If a check is used within the present automated accountant system, the contractor would enter on the check face appropriate standardized codes which identify a preferred accounting treatment of the window purchased. The standardized code would specifically identify one or more of the following: the type of item purchased, the anticipated use or category of that item, the specific job for which the inventory was purchased, and any depreciation and expense parameters. The \$500 amount, along with the
- 20       accounting codes representing specific past, present and future accounting considerations, is preferably automatically read by check processing/imaging equipment and the information electronically entered by the use of common system language and standardized codes into the contractor's account files at
- 25       a financial institution or elsewhere for tabulation, manipulation, reporting and review. The account files of the vendor may or may not be automatically adjusted for the transaction. However, the vendor's cash account file would be increased automatically by the \$500 amount, that receipt being
- 30       categorized as a type of income transaction.
- 35

If a credit card or other means of electronic payment is employed by the contractor to pay for the window, the vendor (in this case, the building materials retailer) uses pre-entered common system language and standardized codes relating to the DHW34 window unit which would be electronically transmitted at the point of credit verification or shortly thereafter, adjusting the appropriate account files of the vendor, automatically identifying the item (window) category for contractor account ledgers. The adjustment of files may take place outside the transaction system. More than one transaction system must be integrated together to report separately recorded transaction detail to, in this case, the contractor's and the building materials vendor's automated accounting ledgers.

Assuming a credit card is used to purchase the \$500 window, the \$500 debt would be registered in the contractor's credit card payable ledger. The \$500 would be allocated to the contractor's job costing file (in this case, the job might be labeled the "rental units job") which would be separated from other contractor files for purposes of reviewing profit and loss on the "rental units job". The \$500 would also be entered into a depreciation file for "rental units job" for calculation of present and future depreciation. If the contractor owns the rental units, the \$500 represents a capitalized addition to the asset account, which is depreciated, not expensed, over time. The \$500 amount is divided by the number of years of permissible useful life, which amount is automatically carried forward in ledgers for deduction in future periods as determined by generally accepted accounting practice. Each future income and expense and assets and liability statement would report both current cash and accrual detail. Tax calculations are performed automatically from the accumulation of all pertinent cash and accrual detail if desired.

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Both the contractor and the building materials vendor in this case likely operate bank accounts with one or more financial institutions. Generally, one company or individual account controls the overall operation of the business or household. Subsidiary bank accounts may be established to operate payroll, accounts receivable, escrow, savings and other separate financial functions. Subsidiary account transactions may be combined with controlling bank account transactions for monthly, quarterly and yearly totals and analyses. The cash balances in bank accounts offer a readily available benchmark to determine the accuracy of transaction figures at month end and year end. Both the contractor and building material vendor will attempt to balance bank figures with privately generated figures.

Periodic (e.g., monthly) income and expense statements may be calculated automatically once transaction details from multiple transaction systems (e.g., credit card, check, debit card, telephone payment, electronic bill payments, etc.) are transferred to control account ledgers through the use of common language and standardized code structures within and between each of the transaction systems.

When the \$500 window payment is automatically recorded in the contractor's check or credit card ledger, a \$500 deduction from cash balances is recorded. The \$500 is categorized as a specific expense or asset per the original transaction codes. The \$500 is both cash or an income item on the vendor's books, automatically recorded per the original transaction codes. The \$500 means much more in terms of accounting than in conventional systems because the \$500 represents both a financial indication of present and future financial treatment by the user. Prior art systems deal in current assets and liabilities; that is, in inventory items and funds payments. The present automated accountant system deals in current assets and liabilities, in past and future

assets and liabilities, in current revenues and expenses and taxes, and in past and future revenues and expenses and taxes.

The \$500 paid for a DHW34 window is statistically significant for both the vendor and contractor as well as other interested analysts. It is significant in light of the types and numbers of similar and other window units sold or purchased by the contractor, vendor and other contractors and vendors. That significance takes on greater importance when multiple transaction systems can, through the use of one or more common languages and standardized codes, compare and contrast the transactions of other similar or different users of the system. Standardization facilitates the collection of large masses of transaction details for past, present and future comparisons and analysis. The multiple layers or tiers of income, expense, asset and liability recordation that takes place within and among the transaction systems which can be tied together by the present automated accountant system provide opportunities for understanding consumption habits, management efficiencies, profits and losses, tax consequences and other demographics.

The automated accounting system of the present invention possesses several advantages over conventional systems. The present automated accountant is an accounting system enabling ongoing financial planning, P/L analysis, and critical path decisioning. Consumers may dynamically control depreciation, amortization, suspense accounts, expense/income levels, principal, interest, P/L, etc. While categorization is part of the process, the system also includes dynamic, multi-dimensional consumer controls, and provides computational intelligence, all resulting in informed business decisions as a result of the output.

While conventional automatic bill payment services offer consumer payment control with a transaction register, the present automatic accounting system permits consumer controlled dynamic interaction and integration of multiple

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debts and credits. In addition, the present system produces incremental results, enabling future critical path financial decisions. Furthermore, while conventional automatic bill paying systems create a categorized historical transaction register, the present system converts data into intelligence via multi-dimensional consumer control structure and comprehensive assessment of financial characteristics critical to business/personal financial success.

The system of the present invention is a personalized and dynamic accounting system providing targeted future business/personal financial strategies. The present system may accumulate multiple financial data and create a personalized profile noting "critical path" financial management areas. A simple single threaded activity summary listing enables the posting of payment activity, and consumer controls result in payments executed by the service provider and the creation of a payment transaction register.

The automated accounting system of the present invention provides a data accumulation and computational intelligence engine which transforms data into intelligence. Consumers may control the engine with a set of tools permitting multi-dimensional classification of transactional activity. The results enable informed decisions as to ongoing business and personal financial matters.

While specific embodiments of the invention have been disclosed, it will be appreciated by those skilled in the art that various modifications and alterations to those details could be developed in light of the overall teachings of the disclosure. Accordingly, the particular arrangements disclosed are meant to be illustrative only and not limiting as to the scope of the invention which is to be given the full breadth of the appended claims and any and all equivalents thereof.

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